

MEMORANDUM

To:

Traffic Study Files

From:

Dipti Borkar-Desai, P.E., North Area Engineer

Transportation Engineering Division Austin Transportation Department

Date:

September 30, 2019

Subject:

SPEED ZONE INVESTIGATION

Location:

Neenah Avenue - Parmer Lane (FM 734) to 85 feet west of Pearson Ranch Road (Austin

City Limit)

Date(s) of Previous Investigation: N/A

A Traffic Engineering Investigation has been conducted by the Transportation Engineering Division of the Austin Transportation Department to determine the posted speed limit on Neenah Avenue from Parmer Lane (FM 734) to 85 feet west of Pearson Ranch Road (Austin City Limit) in accordance with the Texas Procedures for Establishing Speed Zones, 2006 (See Figure 1).

General Conditions:

Neenah Avenue until mid-2016 was a dead end near St. Dominic Savio Catholic High School with a posted speed limit of 30 miles per hour (mph) based on prima facie speed limit. Development along Neenah Avenue included a mix of commercial development immediately east of Parmer Lane (FM 734), residential development with no homes fronting the roadway and with entry to the homes accessible by residential streets, churches, and two schools (Holy Family Catholic School and St. Dominic Savio Catholic High School). As a result, most of the users on Neenah Avenue were solely accessing the residences and schools.

Neenah Avenue was extended through Pearson Ranch Road in June 2016. Development along this extension is also residential with no homes fronting the roadway and entry to the homes accessible by residential streets. Neenah Avenue was subsequently widened in February 2019 between Olive Hill Drive and west of Iveans Way from a two-lane, undivided street to four-lane, Level 3 street (minor arterial) with a two-way center turn lane. Neenah Avenue transitions to a four-lane, median-divided Level 3 (minor arterial) street at either end of the study segment near Parmer Lane (FM 734) and Pearson Ranch Road.

As a result, Austin Transportation Department performed an engineering study along Neenah Avenue to review current traffic conditions to determine the posted speed limit (See Figure 2).



Speed/Volume Data Collected:

The following speed and volume data were collected in September 2019 to measure conditions along the study segment.

Block Number	Street Segment	Existing Speed Limit	85% Percentile Speed		Traffic Volumes
			EB	WB	
9900	East of W. Parmer Lane	30 MPH	36.3	35.6	EB- 3,900 WB- 4,272
9600	East of Olive Hill Drive	30 MPH	40.1	39.7	EB- 3,761 WB- 3,452
9400	East of Solera Drive	30 MPH	41.8	38.4	EB- 3,167 WB- 3,002
9200	West of Iveans Way	Not Posted	42.3	40.1	EB- 2,966 WB- 3,278
9100	East of Ivalenes Hope Drive	Not Posted	42.4	38.6	EB- 3,522 WB- 3,180

Crash Data

Austin Police Department's crash database was reviewed to analyze documented crashes along the study segment within the past three years. The crashes at the intersection of Parmer Lane (FM 734) and Neenah Avenue were not included. Two crashes which were attributed to driver failing to yield right-of-way to the other were documented during this period:

Date / Time	Direction				·		
	At Fault	Other	Weather	Light	Road	Injury	Comments
02/11/19 4:57 PM	WB	EB	Rain	Dark, Lighted	Wet	None	FTYROW (at Iveans Way)
11/11/16 7:35 AM	NB	ЕВ	Cloudy	Daylight	Dry	None	FTYROW (at Solera Drive)

Recommendation

The analysis of the speed data indicates that the 85th percentile speed along Neenah Avenue is between 35.6 and 42.4 mph in the section from Parmer Lane (FM 734) to 85 feet west of Pearson Ranch Road (Austin City Limit).

With the extension of Neenah Avenue through Pearson Ranch Road in June 2016 and subsequent widening in February 2019 between Olive Hill Drive and west of Iveans Way from a two-lane, undivided street to four-lane, with a two-way center turn lane, Neenah Avenue functions as a Level 3 street (minor arterial). However, due to the presence residential development, churches, and schools, a speed limit greater than 35 mph is not recommended.

Based on the analysis of this information, it is my engineering judgment that the speed limit on Neenah Avenue from Parmer Lane (FM 734) to 85 feet west of Pearson Ranch Road (Austin City Limit) should be <u>35</u> miles per hour (See Figure 3).









FIGURE 3.

Neenah Avenue

Proposed Speed Limits

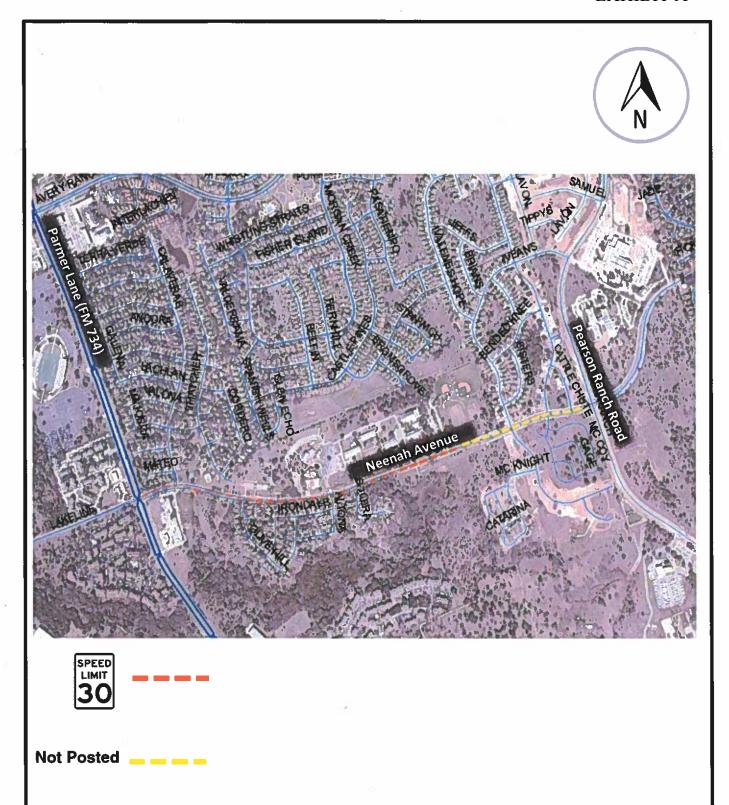


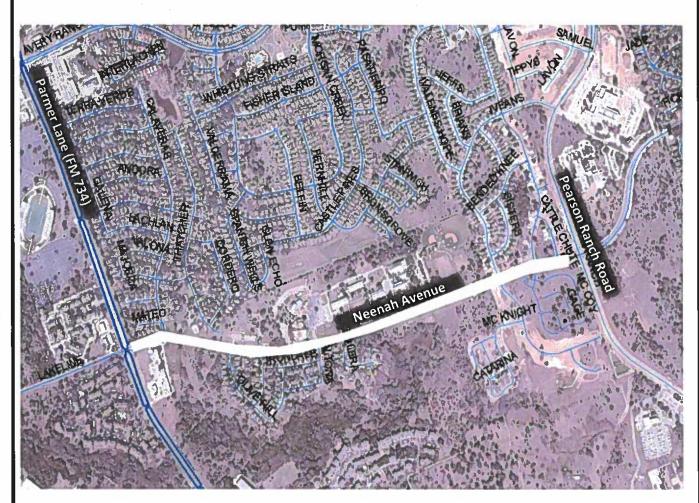


FIGURE 2.

Neenah Avenue

Existing Posted Speed Limits





Segment Limits: Parmer Lane (FM 734) to Pearson Ranch Road (Austin City Limit)





FIGURE 1.

Neenah Avenue

Study Segment and Location